TOTAL CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) clay unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	1,120,000	155,000		1,270,000	2.37	46.50
1901	1,250,000	171,000		1,420,000	2.62	51.40
1902	1,330,000	185,000		1,520,000	2.26	42.60
1903	1,510,000	199,000		1,710,000	2.42	44.00
1904	1,400,000	183,000		1,580,000	2.31	42.00
1905	1,660,000	218,000		1,880,000	2.32	42.20
1906	1,870,000	256,000		2,120,000	2.41	43.80
1907	2,010,000	274,000		2,290,000	2.53	44.40
1908	1,590,000	202,000		1,790,000	2.39	43.50
1909	1,990,000	275,000		2,260,000	2.49	45.30
1910	2,200,000	295,000		2,490,000	2.38	41.80
1911	2,020,000	288,000		2,310,000	2.48	43.50
1912	2,330,000	321,000		2,650,000	2.40	40.70
1913	2,440,000	324,000		2,760,000	2.43	40.00
1914	2,040,000	384,000		2,430,000	2.74	44.70
1915	2,190,000	238,000		2,430,000	2.45	39.50
1916	2,720,000	286,000	66,900	2,940,000	2.65	39.60
1917	2,890,000	259,000	75,500	3,070,000	3.25	41.40
1918	2,780,000	193,000	76,700	2,890,000	3.63	39.20
1919	2,160,000	198,000	62,100	2,300,000	4.76	44.90
1920	2,870,000	383,000	109,000	3,150,000	5.35	43.60
1921	1,680,000	198,000	43,000	1,840,000	5.32	48.50
1922	2,530,000	337,000	43,300	2,820,000	4.86	47.10
1923	3,250,000	363,000	80,400	3,540,000	4.69	44.70
1924	3,510,000	409,000	71,700	3,850,000	4.52	43.10
1925	3,840,000	404,000	81,000	4,170,000	4.48	41.70
1926	3,810,000	452,000	87,600	4,180,000	4.96	45.70
1927	3,730,000	365,000	101,000	4,000,000	4.93	46.20
1928	3,910,000	343,000	125,000	4,130,000	4.88	46.50
1929	4,230,000	343,000	158,000	4,410,000	4.73	45.10
1930	3,900,000	265,000	137,000	4,030,000	4.45	43.40
1931	2,550,000	177,000	104,000	2,620,000	4.45	47.70
1932	1,470,000	119,000	86,700	1,500,000	4.79	57.00
1933	1,870,000	140,000	103,000	1,910,000	4.59	57.50
1934	2,180,000	123,000	115,000	2,190,000	4.64	56.40
1935	2,860,000	160,000	145,000	2,870,000	4.45	53.00
1936	3,640,000	178,000	147,000	3,810,000	4.60	53.90
1937	4,050,000	186,000	160,000	4,160,000	4.68	53.00
1938	2,630,000	103,000	129,000	2,670,000	5.24	60.60
1939	3,560,000	138,000	152,000	3,690,000	4.95	58.00
1940	4,400,000	127,000	197,000	4,420,000	4.49	52.30
1941	6,550,000	102,000	198,000	6,570,000	4.14	45.90
1942	6,850,000	75,800	192,000	6,860,000	3.90	39.00
1943	18,900,000	64,900	155,000	18,800,000	2.05	19.30
1944	15,700,000	60,300	189,000	15,600,000	2.27	21.00
1945	17,200,000	70,100	187,000	17,100,000	2.46	22.30
1946	27,700,000	106,000	233,000	27,600,000	2.14	17.90
1947	30,500,000	102,000	288,000	30,300,000	2.35	17.20
1948	34,200,000	123,000	289,000	34,100,000	2.41	16.30
1949	31,900,000	95,300	233,000	31,800,000	2.39	16.40
1950	35,700,000	146,000	231,000	35,700,000	2.59	17.50

TOTAL CLAY STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1951	39,400,000	137,000	325,000	39,200,000	3.14	19.70
1952	37,800,000	130,000	299,000	37,700,000	3.34	20.50
1953	38,500,000	135,000	291,000	38,300,000	3.14	19.20
1954	38,600,000	149,000	308,000	38,400,000	3.06	18.50
1955	43,600,000	175,000	385,000	43,400,000	3.03	18.40
1956	46,100,000	160,000	463,000	45,800,000	3.35	20.10
1957	41,400,000	147,000	507,000	41,100,000	3.53	20.50
1958	39,700,000	169,000	222,000	39,600,000	3.58	20.20
1959	44,800,000	150,000	504,000	44,400,000	3.35	18.80
1960	44,500,000	134,000	553,000	44,100,000	3.42	18.80
1961	43,000,000	131,000	558,000	42,600,000	3.41	18.60
1962	43,400,000	116,000	628,000	42,900,000	3.48	18.80
1963	45,500,000	112,000	671,000	44,800,000	3.56	19.00
1964	48,000,000	121,000	769,000	47,400,000	3.59	18.90
1965	50,000,000	97,100	771,000	49,300,000	3.68	19.00
1966	51,500,000	122,000	721,000	50,900,000	4.00	20.10
1967	49,600,000	95,600	1,040,000	48,600,000	3.98	19.40
1968	52,000,000	84,000	1,380,000	50,700,000	4.03	18.90
1969	53,200,000	70,700	1,430,000	51,900,000	4.24	18.80
1970	50,200,000	78,500	1,880,000	48,300,000	4.22	17.70
1971	51,700,000	58,100	1,790,000	50,000,000	4.24	17.10
1972	54,300,000	60,500	1,680,000	52,600,000	4.53	17.70
1973	58,800,000	47,800	1,900,000	56,900,000	4.86	17.80
1974	55,400,000	38,800	2,220,000	53,200,000	5.85	19.30
1975	44,800,000	34,500	2,100,000	42,700,000	7.17	21.70
1976	47,800,000	35,100	2,260,000	45,600,000	8.31	23.80
1977	48,500,000	32,700	2,320,000	46,200,000	9.10	24.50
1978	51,800,000	22,400	2,390,000	49,400,000	10.60	26.60
1979	49,800,000	46,400	2,910,000	47,000,000	12.90	29.00
1980	44,500,000	30,900	2,920,000	41,600,000	15.40	30.50
1981	40,400,000	30,200	2,860,000	37,600,000	18.70	33.60
1982	32,200,000	22,000	2,380,000	29,900,000	18.90	31.80
1983	37,200,000	18,900	2,250,000	34,900,000	19.50	31.90
1984	39,800,000	28,700	2,450,000	37,300,000	19.90	31.10
1985	40,900,000	37,100	2,520,000	38,400,000	18.40	27.90
1986	40,600,000	34,800	2,640,000	38,000,000	19.80	29.40
1987	43,400,000	34,200	3,020,000	40,400,000	17.40	24.90
1988	44,500,000	32,800	3,540,000	41,000,000	21.60	29.70
1989	42,400,000	27,800	3,760,000	38,700,000	25.30	33.20
1990	42,200,000	29,600	4,090,000	38,200,000	24.00	29.90
1991	41,200,000	35,300	4,000,000	37,200,000	23.50	28.10
1992	40,400,000	41,200	4,160,000	36,300,000	22.70	26.30
1993	40,900,000	39,400	4,150,000	36,700,000	22.40	25.30
1994	42,000,000	35,600	4,620,000	37,400,000	23.30	25.60
1995	43,100,000	35,000	4,680,000	38,500,000	24.20	25.90
1996	43,200,000	44,500	4,840,000	38,400,000	23.60	24.50
1997	41,700,000	63,700	5,080,000	36,700,000	22.50	22.80
1998	41,900,000	86,400	5,230,000	36,800,000	23.30	23.30
1999	42,200,000	90,400	4,810,000	37,500,000	20.40	20.00
2000	40,800,000	95,400	5,260,000	35,600,000	18.70	17.70
2001	39,600,000	148,000	4,970,000	34,800,000	21.00	19.40

TOTAL CLAY STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2002	39,300,000	217,000	4,960,000	34,600,000	23.30	21.10

BALL CLAY STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	19,400	7,450		26,800	9.87	194.00
1901	19,100	6,230		25,300	5.99	117.00
1902	45,800	7,090		52,900	4.87	91.90
1903	83,200	9,220		92,400	3.88	70.60
1904	41,900	4,770		46,700	4.12	74.90
1905	55,700	5,360		61,000	3.64	66.20
1906	49,100	8,360		57,500	4.93	89.60
1907	47,500	11,200		58,800	5.21	91.40
1908	37,000	4,420		41,500	4.12	74.90
1909	44,500	11,200		55,700	5.72	104.00
1910	64,100	19,200		83,300	5.27	92.50
1911	59,000	15,600		74,600	4.62	81.10
1912	58,900	21,000		79,900	5.15	87.30
1913	60,900	22,700		83,600	5.29	87.20
1914	61,600	15,200		76,800	4.92	80.30
1915	68,400	8,040		76,400	4.77	76.90
1916	81,400	2,270		83,700	4.81	71.90
1917	97,400	79.8		97,500	5.84	74.40
1918	81,600	103		81,700	7.24	78.20
1919	59,000	3.63		59,000	8.83	83.20
1920	63,000	6,200		69,200	10.72	87.40
1921	49,000	4,050		53,100	8.14	74.10
1922	69,700	6,640		76,300	6.89	66.80
1923	88,100	11,800		99,900	7.43	70.80
1924	75,300	6,400		81,700	7.89	75.20
1925	99,400	10,800		110,000	7.32	68.20
1926	102,000	6,000		108,000	8.61	79.30
1927	109,000	3,520		112,000	8.50	79.70
1928	110,000	9,310		119,000	9.03	86.10
1929	107,000	25,400		133,000	9.47	90.30
1930	84,800	17,100		102,000	8.77	85.60
1931	75,300	13,800		89,100	8.49	91.00
1932	43,200	5,330		48,500	7.38	87.90
1933	58,600	6,440		65,000	7.24	90.70
1934	57,000	8,590		65,600	8.15	99.20
1935	87,300	14,100		101,000	7.85	93.50
1936	91,900	29,200		121,000	8.21	96.30
1937	110,000	35,000		145,000	8.73	98.90
1938	86,200	18,500		105,000	8.98	104.00
1939	117,000	26,200		143,000	8.18	95.90
1940	128,000	29,200		157,000	8.43	98.10
1941	180,000	24,300		204,000	9.40	104.00
1942	147,000	18,000		165,000	9.44	94.40
1943	134,000	14,100		148,000	9.50	89.50
1944	141,000	16,000		157,000	9.76	90.40
1945	158,000	16,200		175,000	10.20	92.10
1946	221,000	20,600		241,000	11.10	92.40
1947	244,000	23,500		268,000	12.20	89.30
1948	271,000	29,200		300,000	12.70	85.50
1949	226,000	21,900		248,000	13.60	93.00

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Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1950	294,000	31,700		326,000	13.30	89.70
1951	313,000	32,300		345,000	11.80	74.20
1952	277,000	26,000		303,000	14.10	86.40
1953	273,000	23,400		296,000	12.40	76.00
1954	298,000	23,200		321,000	13.80	83.90
1955	373,000	30,500		404,000	14.20	86.60
1956	416,000	23,800		440,000	14.50	86.80
1957	370,000	20,000		390,000	14.80	85.70
1958	360,000	16,300		376,000	15.20	85.80
1959	431,000	21,100		452,000	15.00	84.10
1960	403,000	13,600		417,000	14.90	82.20
1961	403,000	10,700		414,000	15.20	82.90
1962	442,000	13,400		455,000	15.40	83.00
1963	497,000	13,700		510,000	15.10	80.60
1964	515,000	14,600		529,000	15.20	79.90
1965	536,000	13,500		549,000	15.30	79.20
1966	518,000	14,200		532,000	14.20	71.60
1967	507,000	11,900		519,000	14.90	72.50
1968	572,000	15,800		587,000	14.70	68.90
1969	619,000	11,600		630,000	15.80	70.10
1970	644,000	15,700	20,000	640,000	15.40	64.50
1971	547,000	14,400	69,900	491,000	17.20	69.10
1972	613,000	8,830	78,900	543,000	17.20	67.00
1973	696,000	11,400	103,000	603,000	18.30	67.10
1974	741,000	16,200	119,000	639,000	18.30	60.40
1975	641,000	10,800	142,000	510,000	19.90	60.30
1976	727,000	9,660	142,000	594,000	20.50	58.70
1977	811,000	10,300	106,000	715,000	22.90	61.50
1978	849,000	6,610	131,000	725,000	24.40	61.00
1979	895,000	11,600	153,000	754,000	28.70	64.40
1980	811,000	8,500	191,000	628,000	34.30	67.90
1981	767,000	6,620	192,000	581,000	38.10	68.30
1982	583,000	4,690	131,000	457,000	39.60	66.90
1983	677,000	3,590	132,000	549,000	39.50	64.60
1984	787,000	1,800	150,000	639,000	38.80	60.90
1985	818,000	1,150	185,000	634,000	44.30	67.10
1986	805,000	2,690	146,000	661,000	43.50	64.70
1987	892,000	1,600	162,000	732,000	40.30	57.80
1988	990,000	1,610	186,000	806,000	42.40	58.50
1989	903,000	1,480	157,000	748,000	46.00	60.40
1990	788,000	1,420	69,000	720,000	42.70	53.30
1991	784,000	753	58,000	727,000	42.30	50.70
1992	854,000	699	49,000	806,000	40.90	47.60
1993	911,000	687	60,000	852,000	41.70	47.10
1994	1,020,000	836	81,000	940,000	44.40	48.80
1995	993,000	1,370	28,000	966,000	45.60	48.80
1996	935,000	1,400	80,000	856,000	43.20	44.80
1997	1,060,000	823	91,000	970,000	45.50	46.20
1998	1,130,000	2,670	140,000	993,000	42.10	42.10
1999	1,200,000	827	107,000	1,090,000	38.50	37.70

BALL CLAY STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2000	1,140,000	504	100,000	1,040,000	38.30	36.30
2001	1,110,000	3,570	174,000	940,000	40.60	37.30
2002	1,120,000	407	127,000	993,000	40.40	36.60

BENTONITE STATISTICS
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Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1930	97,400			97,400	8.82	86.00
1931	71,500			71,500	6.60	70.70
1932	65,000			65,000	7.75	92.30
1933	107,000			107,000	7.14	89.50
1934	195,000			195,000	5.38	65.50
1935	143,000			143,000	7.33	87.30
1936	161,000	1.81		161,000	8.48	99.40
1937	177,000	0.907		177,000	8.49	96.10
1938	174,000	6.35		174,000	7.88	91.10
1939	199,000	56.2	18,100	199,000	8.54	100.00
1940	228,000	20.9	24,500	228,000	8.43	98.10
1941	321,000			321,000	7.63	84.60
1942	340,000		9,070	340,000	7.49	74.90
1943	436,000		5,806	436,000	6.88	64.80
1944	496,000		18,100	496,000	7.27	67.30
1945	521,000		13,300	521,000	7.24	65.60
1946	546,000		22,700	546,000	7.99	66.80
1947	693,000		37,200	693,000	8.59	62.80
1948	836,000		37,600	836,000	8.54	57.70
1949	787,000			787,000	8.82	60.40
1950	883,000			883,000	9.69	65.50
1951	1,110,000			1,110,000	11.80	73.70
1952	1,200,000	140		1,200,000	12.40	76.10
1953	1,150,000	227		1,150,000	14.00	85.70
1954	1,160,000	238		1,160,000	12.70	76.90
1955	1,340,000	721		1,340,000	12.80	78.00
1956	1,420,000			1,420,000	12.90	77.40
1957	1,320,000		67,100	1,320,000	13.50	78.50
1958	1,170,000		40,800	1,170,000	13.10	73.70
1959	1,240,000		42,900	1,240,000	12.70	71.30
1960	1,150,000		52,700	1,150,000	13.00	71.80
1961	1,190,000		39,700	1,190,000	12.80	70.00
1962	1,310,000		54,700	1,310,000	12.40	67.00
1963	1,440,000			1,440,000	12.90	68.70
1964	1,570,000	162		1,570,000	12.40	65.00
1965	1,710,000	353	206,000	1,510,000	9.41	48.70
1966	1,870,000		275,000	1,590,000	8.78	44.20
1967	1,850,000	110	289,000	1,560,000	8.18	39.90
1968	2,210,000	132	433,000	1,780,000	7.30	34.20
1969	2,390,000	68.9	455,000	1,940,000	7.43	33.00
1970	2,300,000	166	450,000	1,850,000	7.01	29.50
1971	2,420,000	59.9	601,000	1,820,000	6.43	25.90
1972	2,510,000	115	473,000	2,040,000	6.98	27.20
1973	2,790,000	89.8	500,000	2,290,000	7.20	26.40
1974	3,000,000	36.3	648,000	2,360,000	6.72	22.20
1975	2,930,000	2,140	632,000	2,300,000	4.87	14.80
1976	3,190,000	87.1	714,000	2,480,000	3.26	9.30
1977	3,400,000	123	715,000	2,680,000	7.85	21.10
1978	4,050,000	42.6	656,000	3,400,000	13.30	33.30
1979	4,010,000	74.4	774,000	3,240,000	15.80	35.60
1980	3,800,000	141	815,000	2,980,000	17.80	35.20

BENTONITE STATISTICS
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Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1981	4,490,000	71.7	782,000	3,710,000	22.90	41.00
1982	2,940,000	141	606,000	2,340,000	20.60	34.80
1983	2,620,000	690	503,000	2,120,000	18.50	30.30
1984	3,120,000	5,320	511,000	2,610,000	20.80	32.70
1985	2,900,000	7,350	581,000	2,330,000	24.70	37.40
1986	2,550,000	2,510	527,000	2,030,000	23.30	34.70
1987	2,550,000	3,660	489,000	2,060,000	24.80	35.60
1988	2,870,000	3,200	568,000	2,310,000	25.70	35.40
1989	3,110,000	2,430	671,000	2,440,000	30.00	39.40
1990	3,470,000	2,050	699,000	2,780,000	24.30	30.30
1991	3,310,000	2,220	660,000	2,650,000	22.70	27.10
1992	2,950,000	2,530	591,000	2,370,000	26.60	30.80
1993	2,870,000	1,990	606,000	2,270,000	20.90	23.50
1994	3,290,000	2,050	768,000	2,520,000	26.70	29.30
1995	3,820,000	3,110	733,000	3,090,000	20.70	22.10
1996	3,740,000	7,510	746,000	3,000,000	18.40	19.10
1997	4,020,000	7,560	850,000	3,180,000	27.40	27.80
1998	3,820,000	6,600	818,000	3,010,000	32.20	32.20
1999	4,070,000	8,930	719,000	3,360,000	30.90	30.20
2000	3,760,000	8,470	761,000	3,010,000	25.80	24.40
2001	3,970,000	4,280	628,000	3,350,000	33.80	31.10
2002	3,970,000	29,100	722,000	3,280,000	29.20	26.50

FIRE CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	852,000			852,000	1.22	23.90
1901	927,000			927,000	1.76	34.50
1902	924,000			924,000	1.09	20.60
1903	1,170,000			1,170,000	1.36	24.70
1904	1,050,000			1,050,000	1.33	24.20
1905	1,280,000			1,280,000	1.37	24.90
1906	1,390,000			1,390,000	1.46	26.60
1907	1,450,000			1,450,000	1.51	26.50
1908	1,110,000			1,110,000	1.43	26.00
1909	1,450,000			1,450,000	1.53	27.80
1910	1,630,000			1,630,000	1.42	24.90
1911	1,520,000			1,520,000	1.50	26.30
1912	1,650,000			1,650,000	1.50	25.40
1913	1,790,000			1,790,000	1.53	25.20
1914	1,400,000			1,400,000	1.62	26.40
1915	1,550,000			1,550,000	1.61	26.00
1916	1,990,000		41,500	1,950,000	1.93	28.90
1917	2,200,000		49,000	2,150,000	2.60	33.10
1918	2,170,000		54,600	2,120,000	2.68	28.90
1919	1,650,000		34,000	1,610,000	2.86	27.00
1920	2,150,000		49,100	2,100,000	3.41	27.80
1921	1,160,000		21,500	1,140,000	3.22	29.30
1922	1,600,000		22,100	1,580,000	2.99	29.00
1923	2,160,000		45,400	2,110,000	3.13	29.80
1924	2,270,000		37,800	2,230,000	3.02	28.80
1925	2,400,000		40,000	2,360,000	3.12	29.10
1926	2,630,000		43,300	2,590,000	3.15	29.00
1927	2,540,000		43,600	2,490,000	3.12	29.20
1928	2,610,000		54,600	2,560,000	2.94	28.00
1929	2,960,000		69,500	2,890,000	2.80	26.70
1930	2,380,000		56,800	2,320,000	2.61	25.50
1931	1,390,000		41,100	1,350,000	2.79	29.90
1932	704,000		20,000	684,000	3.04	36.20
1933	1,050,000		29,400	1,020,000	3.04	38.10
1934	1,220,000		32,700	1,190,000	3.14	38.20
1935	1,760,000		45,300	1,710,000	2.91	34.60
1936	2,240,000		59,800	2,240,000	2.74	32.10
1937	2,530,000		70,200	2,460,000	2.84	32.20
1938	1,320,000		50,600	1,270,000	3.07	35.50
1939	2,020,000		52,000	2,020,000	2.88	33.80
1940	2,510,000		87,500	2,510,000	2.81	32.70
1941	3,780,000		83,200	3,780,000	2.69	29.80
1942	4,390,000		107,000	4,390,000	2.59	25.90
1943	7,070,000		88,400	6,990,000	2.43	22.90
1944	5,760,000		79,600	5,680,000	2.46	22.80
1945	5,530,000		85,800	5,440,000	2.82	25.50
1946	7,170,000		88,900	7,090,000	2.90	24.30
1947	8,200,000		100,000	8,100,000	3.20	23.40
1948	8,940,000		93,000	8,840,000	3.29	22.20
1949	7,780,000		73,200	7,700,000	3.26	22.30
1950	8,650,000		67,800	8,580,000	3.35	22.70

FIRE CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1951	10,800,000		91,800	10,700,000	4.53	28.40
1952	10,200,000		79,900	10,200,000	4.73	29.10
1953	9,310,000		82,500	9,230,000	4.13	25.20
1954	7,980,000		70,700	7,910,000	4.18	25.30
1955	9,830,000		99,200	9,730,000	4.28	26.00
1956	10,700,000		138,000	10,600,000	5.02	30.10
1957	9,800,000		124,000	9,680,000	5.23	30.30
1958	7,990,000		114,000	7,880,000	5.05	28.50
1959	8,950,000		125,000	8,820,000	5.05	28.30
1960	9,000,000		161,000	8,830,000	5.03	27.70
1961	7,880,000		141,000	7,740,000	4.92	26.80
1962	7,320,000		171,000	7,150,000	4.89	26.40
1963	7,610,000		240,000	7,370,000	5.20	27.70
1964	7,760,000		224,000	7,530,000	5.29	27.80
1965	8,180,000		166,000	8,010,000	5.27	27.30
1966	7,960,000		196,000	7,770,000	5.30	26.70
1967	7,230,000		160,000	7,070,000	5.83	28.50
1968	7,310,000		138,000	7,170,000	5.76	27.00
1969	6,590,000		148,000	6,440,000	5.73	25.40
1970	5,860,000		152,000	5,710,000	5.89	24.80
1971	2,760,000		147,000	2,610,000	6.88	27.70
1972	3,250,000		112,000	3,140,000	8.98	35.00
1973	3,690,000		178,000	3,510,000	9.80	36.00
1974	3,760,000		203,000	3,550,000	10.90	36.20
1975	2,960,000		199,000	2,760,000	12.10	36.80
1976	3,040,000		269,000	2,770,000	13.20	37.80
1977	2,690,000		279,000	2,410,000	13.80	37.00
1978	2,840,000		214,000	2,620,000	15.00	37.50
1979	2,660,000		203,000	2,460,000	17.70	39.80
1980	1,900,000		279,000	1,620,000	19.00	37.50
1981	1,750,000		263,000	1,490,000	17.80	32.00
1982	986,000		163,000	823,000	18.70	31.60
1983	946,000		150,000	797,000	17.30	28.40
1984	1,040,000		208,000	831,000	20.40	31.90
1985	884,000		202,000	682,000	20.40	30.80
1986	537,000		171,000	365,000	22.80	33.80
1987	729,000		158,000	571,000	23.00	33.10
1988	794,000		254,000	539,000	23.50	32.40
1989	826,000	149	284,000	542,000	25.30	33.20
1990	626,000	178	213,000	413,000	25.80	32.10
1991	474,000	425	199,000	275,000	27.80	33.30
1992	383,000	8,090	228,000	163,000	27.00	31.40
1993	459,000	1,100	148,000	312,000	25.10	28.30
1994	456,000	1,030	225,000	232,000	25.40	28.00
1995	583,000	1,350	281,000	303,000	22.00	23.50
1996	505,000	355	295,000	210,000	21.20	22.00
1997	415,000	69.0	222,000	193,000	19.30	19.60
1998	410,000	2,150	168,000	244,000	18.30	18.30
1999	402,000	260	189,000	213,000	16.80	16.50
2000	476,000	73.0	216,000	260,000	15.90	15.00
2001	383,000	148	238,000	145,000	19.80	18.20

FIRE CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2002	446,000	218	251,000	195,000	23.50	21.30

FULLER'S EARTH STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	8,800	8,300		17,100	7.74	152.00
1901	12,800	10,900		23,700	7.48	147.00
1902	10,430	13,700		24,200	8.31	157.00
1903	18,770	15,500		34,300	9.06	165.00
1904	26,740	9,270		36,000	6.72	122.00
1905	22,840	13,200		36,100	8.88	161.00
1906	29,070	13,400		42,500	8.79	160.00
1907	29,800	14,900		44,700	9.27	163.00
1908	26,960	11,000		38,000	9.78	178.00
1909	30,380	11,600		41,900	9.61	175.00
1910	29,780	15,000		44,800	9.52	167.00
1911	36,920	16,500		53,500	9.85	173.00
1912	29,680	17,300		47,000	9.60	163.00
1913	34,990	17,000		52,000	9.91	163.00
1914	37,180	22,700		59,800	10.00	163.00
1915	43,460	17,600		61,100	10.50	169.00
1916	61,530	15,200		76,800	11.00	165.00
1917	65,830	15,400		81,200	11.70	149.00
1918	76,630	15,400		92,000	15.00	162.00
1919	96,290	12,600		109,000	20.10	190.00
1920	117,000	17,300		134,000	20.40	166.00
1921	95,800	8,840		105,000	20.00	182.00
1922	126,000	9,590		136,000	17.90	173.00
1923	135,000	7,750	3,360	143,000	16.50	158.00
1924	161,000	6,620	5,730	162,000	16.20	154.00
1925	187,000	7,270	5,620	189,000	15.60	145.00
1926	212,000	8,250	6,030	215,000	15.70	145.00
1927	240,000	6,880	11,100	236,000	15.70	147.00
1928	260,000	6,890	15,000	252,000	15.20	145.00
1929	287,000	7,530	19,300	275,000	15.30	146.00
1930	304,000	6,560	12,900	298,000	14.50	142.00
1931	262,000	3,640	7,590	258,000	11.70	126.00
1932	207,000	3,520	12,900	198,000	10.80	129.00
1933	203,000	3,720	13,500	194,000	10.30	129.00
1934	200,000	3,910	6,110	198,000	10.50	128.00
1935	207,000	2,660	7,400	202,000	10.80	129.00
1936	209,000	2,480	5,550	206,000	10.90	128.00
1937	205,000	2,070	7,350	200,000	11.30	128.00
1938	155,000	1,370	9,110	147,000	11.20	129.00
1939	152,000	1,650	10,100	143,000	11.30	133.00
1940	133,000	430	5,710	128,000	11.10	130.00
1941	188,000	310	9,730	179,000	11.30	125.00
1942	185,000	260	5,490	180,000	11.60	116.00
1943	224,000	178	6,210	218,000	11.90	112.00
1944	267,000	279	6,770	261,000	12.40	115.00
1945	269,000	305	6,130	263,000	12.90	117.00
1946	271,000	176	16,100	255,000	13.60	114.00
1947	299,000	141	8,620	299,000	15.60	114.00
1948	310,000	117	9,620	310,000	17.00	115.00
1949	291,000	353	11,000	291,000	17.90	122.00
1950	359,000	215	14,900	359,000	18.10	123.00

FULLER'S EARTH STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1951	439,000	367	31,800	439,000	18.50	116.00
1952	384,000	142	23,600	384,000	17.90	110.00
1953	395,000	201	16,300	396,000	19.30	118.00
1954	341,000	232	10,900	342,000	20.10	122.00
1955	335,000	70.8	15,900	335,000	22.70	138.00
1956	379,000	1,910		379,000	23.40	140.00
1957	332,000	1,460		332,000	24.30	141.00
1958	325,000	30,600	6,730	325,000	23.40	132.00
1959	372,000	650	9,010	372,000	24.30	136.00
1960	370,000	5,180	10,900	370,000	24.80	136.00
1961	383,000	420	254	383,000	24.90	136.00
1962	372,000	810	218	372,000	25.20	136.00
1963	437,000	830		437,000	25.60	136.00
1964	501,000	232		501,000	25.40	133.00
1965	612,000	24.5	16,900	595,000	25.00	130.00
1966	689,000	1,810	21,100	668,000	25.80	130.00
1967	729,000	72.6	27,500	702,000	27.10	132.00
1968	836,000	69.9	38,100	798,000	26.70	125.00
1969	894,000	61.7	33,600	860,000	27.70	123.00
1970	891,000	59.9	33,600	857,000	26.10	110.00
1971	920,000	31.8	24,500	895,000	25.50	103.00
1972	897,000	39.0	35,400	861,000	24.50	95.40
1973	1,030,000	47.2	52,600	980,000	25.20	92.40
1974	1,110,000	0.907	50,800	1,060,000	31.00	103.00
1975	1,080,000	59.0	38,100	1,040,000	38.10	115.00
1976	1,220,000	20.0	38,100	1,180,000	42.20	121.00
1977	1,300,000	61.7	40,800	1,250,000	45.00	121.00
1978	1,390,000	76.2	53,500	1,330,000	51.90	130.00
1979	1,420,000	168	67,100	1,360,000	56.50	127.00
1980	1,390,000	270	104,000	1,290,000	54.80	108.00
1981	1,500,000	196	101,000	1,400,000	59.10	106.00
1982	1,530,000	36.3	84,400	1,440,000	61.00	103.00
1983	1,730,000		92,500	1,640,000	59.90	98.00
1984	1,720,000	7.26	105,000	1,620,000	67.20	105.00
1985	1,870,000	3,460	94,300	1,780,000	67.50	102.00
1986	1,730,000	49.9	110,000	1,620,000	71.10	106.00
1987	1,870,000	239	97,100	1,770,000	72.60	104.00
1988	1,790,000	486	112,000	1,680,000	80.10	110.00
1989	1,880,000	16.0	96,000	1,780,000	88.30	116.00
1990	2,310,000	69.0	46,000	2,260,000	96.80	121.00
1991	2,320,000	82.0	27,000	2,290,000	98.00	117.00
1992	2,410,000	160	27,000	2,380,000	99.50	116.00
1993	2,480,000	101	63,000	2,420,000	92.00	104.00
1994	2,640,000	1,440	74,000	2,570,000	91.20	100.00
1995	2,640,000	100	63,000	2,580,000	101.00	108.00
1996	2,600,000	368	112,000	2,490,000	106.00	111.00
1997	2,370,000	3,530	144,000	2,230,000	107.00	109.00
1998	2,420,000	288	121,000	2,300,000	92.90	92.90
1999	2,560,000	398	152,000	2,410,000	85.70	83.90
2000	2,910,000	70.0	136,000	2,770,000	82.60	78.20
2001	2,890,000	31	146,000	2,740,000	88.70	81.70

FULLER'S EARTH STATISTICS
By David A. Buckingham and Robert L. Virta
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2002	2,730,000	205	60,000	2,670,000	88.90	80.60

KAOLIN STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	54,500	114,000		168,000	6.51	128.00
1901	88,200	120,000		208,000	6.01	118.00
1902	112,000	135,000		248,000	6.18	117.00
1903	45,600	143,000		188,000	6.68	121.00
1904	101,000	145,000		247,000	5.97	109.00
1905	110,000	170,000		280,000	5.90	107.00
1906	116,000	203,000		319,000	6.03	110.00
1907	103,000	218,000		321,000	6.91	121.00
1908	84,500	160,000		245,000	6.76	123.00
1909	102,000	224,000		326,000	6.55	119.00
1910	109,000	234,000		343,000	6.53	115.00
1911	115,000	231,000		346,000	6.17	108.00
1912	132,000	252,000		385,000	6.17	105.00
1913	141,000	244,000		385,000	6.31	104.00
1914	137,000	298,000		434,000	6.38	104.00
1915	128,000	190,000		318,000	6.09	98.20
1916	182,000	230,000		413,000	5.82	87.00
1917	187,000	219,000		406,000	6.36	81.00
1918	163,000	152,000		316,000	8.28	89.40
1919	139,000	164,000		302,000	11.40	107.00
1920	243,000	328,000		572,000	11.30	91.80
1921	148,000	148,000		295,000	10.60	96.40
1922	250,000	281,000	1,900	530,000	9.97	96.70
1923	306,000	282,000		588,000	10.20	96.90
1924	296,000	320,000		617,000	9.91	94.50
1925	333,000	338,000		671,000	9.56	89.00
1926	392,000	359,000		752,000	9.65	88.90
1927	412,000	308,000		720,000	9.38	87.90
1928	450,000	279,000		729,000	9.67	92.20
1929	470,000	254,000		724,000	9.64	91.90
1930	484,000	214,000		699,000	8.72	85.10
1931	402,000	137,000		540,000	7.42	79.50
1932	313,000	90,500		404,000	6.20	73.80
1933	373,000	105,000		478,000	6.27	78.60
1934	387,000	91,400		478,000	7.22	87.80
1935	475,000	114,000		589,000	8.02	95.50
1936	580,000	127,000		706,000	8.00	93.80
1937	664,000	133,000		797,000	8.23	93.20
1938	540,000	76,400		616,000	8.92	103.00
1939	708,000	104,000		812,000	8.88	104.00
1940	756,000	95,800		756,000	9.25	108.00
1941	987,000	77,200		987,000	9.33	103.00
1942	859,000	57,400	1,930	857,000	9.36	93.60
1943	843,000	50,400		894,000	9.68	91.20
1944	792,000	41,600		834,000	10.00	92.70
1945	853,000	52,200	11,300	894,000	11.00	99.50
1946	1,200,000	81,000	14,400	1,270,000	11.70	97.70
1947	1,290,000	75,000	17,000	1,350,000	13.50	98.50
1948	1,420,000	90,700	17,300	1,500,000	14.10	95.30
1949	1,280,000	70,100	19,800	1,330,000	14.80	102.00
1950	1,590,000	112,000	25,600	1,670,000	15.00	101.00

KAOLIN STATISTICS
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Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1951	1,690,000	100,000	33,100	1,760,000	14.90	93.50
1952	1,660,000	94,300	36,600	1,720,000	15.30	94.30
1953	1,710,000	108,000	39,500	1,780,000	15.80	96.70
1954	1,700,000	122,000	44,600	1,780,000	16.50	99.80
1955	1,970,000	138,000	45,200	2,060,000	16.20	98.40
1956	2,040,000	131,000	53,600	2,120,000	16.80	101.00
1957	1,980,000	122,000	49,900	2,050,000	17.90	104.00
1958	2,020,000	122,000	60,400	2,020,000	18.10	102.00
1959	2,300,000	128,000	76,100	2,300,000	18.10	102.00
1960	2,480,000	115,000	81,400	2,480,000	18.40	102.00
1961	2,490,000	120,000	101,000	2,490,000	18.90	103.00
1962	2,720,000	102,000	121,000	2,720,000	19.70	106.00
1963	2,870,000	97,300	101,000	2,770,000	20.40	109.00
1964	3,020,000	106,000	138,000	2,990,000	20.80	109.00
1965	3,270,000	83,200	175,000	3,180,000	20.50	106.00
1966	3,980,000	106,000	230,000	3,850,000	19.70	99.20
1967	3,600,000	83,500	292,000	3,400,000	21.60	105.00
1968	3,810,000	68,000	354,000	3,530,000	23.00	107.00
1969	4,300,000	59,000	434,000	3,920,000	22.60	100.00
1970	4,470,000	59,300	741,000	3,790,000	23.80	99.90
1971	4,430,000	40,500	611,000	3,860,000	26.10	105.00
1972	4,820,000	23,100	606,000	4,240,000	26.30	102.00
1973	5,440,000	31,000	664,000	4,800,000	27.80	102.00
1974	5,800,000	17,300	770,000	5,050,000	33.20	110.00
1975	4,840,000	17,400	798,000	4,060,000	41.70	126.00
1976	5,560,000	21,000	761,000	4,820,000	46.90	134.00
1977	5,890,000	17,800	864,000	5,040,000	46.20	124.00
1978	6,330,000	11,600	1,070,000	5,270,000	51.80	130.00
1979	7,040,000	28,500	1,440,000	5,630,000	60.10	135.00
1980	7,150,000	14,400	1,260,000	5,900,000	67.00	133.00
1981	6,950,000	12,400	1,280,000	5,680,000	74.50	134.00
1982	5,770,000	8,550	1,180,000	4,600,000	75.20	127.00
1983	6,530,000	6,760	1,210,000	5,330,000	80.30	131.00
1984	7,210,000	9,670	1,290,000	5,940,000	78.30	123.00
1985	7,070,000	8,520	1,250,000	5,830,000	72.50	110.00
1986	7,760,000	9,370	1,440,000	6,330,000	76.40	114.00
1987	8,010,000	9,550	1,840,000	6,180,000	70.60	101.00
1988	8,970,000	7,600	2,140,000	6,840,000	88.00	121.00
1989	8,970,000	3,110	2,340,000	6,640,000	98.30	129.00
1990	9,140,000	3,070	2,830,000	6,320,000	83.40	104.00
1991	9,580,000	3,370	2,860,000	6,720,000	73.40	87.80
1992	8,740,000	4,220	3,000,000	5,740,000	77.20	89.70
1993	8,830,000	7,620	2,980,000	5,850,000	80.70	91.00
1994	8,770,000	10,800	3,180,000	5,600,000	87.90	96.60
1995	9,480,000	12,000	3,240,000	6,250,000	88.60	94.80
1996	9,180,000	13,700	3,240,000	5,950,000	92.50	96.10
1997	9,280,000	30,400	3,380,000	5,930,000	76.60	77.80
1998	9,640,000	52,900	3,550,000	6,140,000	81.30	81.30
1999	9,160,000	57,200	3,310,000	5,910,000	66.30	64.90
2000	8,800,000	62,500	3,690,000	5,170,000	63.30	60.00
2001	8,110,000	114,000	3,440,000	4,780,000	72.90	67.10

KAOLIN STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2002	8,010,000	158,000	3,350,000	4,820,000	90.80	82.30

MISCELLANEOUS CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1900	182,000	25,200		208,000	1.69	33.10
1901	206,000	33,800		240,000	1.43	28.00
1902	238,000	29,000		267,000	1.00	18.90
1903	195,000	32,100		227,000	2.20	40.00
1904	178,000	24,300		202,000	1.17	21.30
1905	193,000	29,200		222,000	1.13	20.60
1906	289,000	31,900		320,000	1.06	19.30
1907	379,000	30,600		410,000	1.13	19.80
1908	330,000	26,400		357,000	1.06	19.30
1909	366,000	29,100		395,000	1.06	19.30
1910	369,000	26,700		395,000	1.03	18.10
1911	284,000	24,600		308,000	1.08	19.00
1912	453,000	30,200		484,000	1.09	18.50
1913	410,000	40,300		450,000	0.98	16.10
1914	410,000	48,400		458,000	0.96	15.70
1915	401,000	22,700		423,000	1.00	16.10
1916	406,000	38,700	25,300	420,000	1.08	16.10
1917	336,000	24,400	26,500	334,000	1.40	17.80
1918	286,000	24,600	22,100	288,000	1.65	17.80
1919	219,000	22,000	28,100	213,000	1.76	16.60
1920	300,000	31,700	59,900	272,000	1.70	13.90
1921	225,000	37,700	21,600	241,000	1.68	15.30
1922	480,000	39,200	19,200	500,000	1.55	15.00
1923	564,000	60,800	31,600	593,000	1.56	14.90
1924	706,000	76,100	28,200	754,000	1.62	15.40
1925	825,000	47,500	35,400	837,000	1.64	15.30
1926	471,000	78,800	38,200	512,000	2.47	22.70
1927	433,000	46,800	46,500	433,000	2.43	22.80
1928	479,000	47,900	55,300	472,000	3.00	28.60
1929	403,000	55,900	69,700	389,000	3.21	30.60
1930	549,000	27,100	67,000	509,000	1.48	14.40
1931	348,000	21,800	55,700	314,000	1.21	13.00
1932	138,000	19,400	53,800	103,000	1.70	20.20
1933	77,000	24,800	60,000	42,100	1.46	18.30
1934	124,000	19,000	76,400	67,000	1.53	18.60
1935	188,000	29,000	92,100	125,000	1.43	17.00
1936	356,000	19,200	82,200	376,000	1.93	22.60
1937	366,000	16,300	83,000	382,000	2.15	24.40
1938	354,000	6,320	69,300	354,000	2.44	28.20
1939	371,000	5,960	71,800	371,000	1.92	22.50
1940	645,000	2,060	79,500	645,000	1.76	20.50
1941	1,100,000	140	105,000	1,100,000	1.28	14.20
1942	925,000	153	68,100	925,000	1.27	12.70
1943	10,200,000	224	60,000	10,100,000	0.74	6.97
1944	8,240,000	2,460	84,800	8,160,000	0.80	7.41
1945	9,840,000	1,480	70,200	9,770,000	0.99	8.97
1946	18,300,000	3,860	91,300	18,200,000	0.87	7.27
1947	19,800,000	3,420	125,000	19,600,000	0.88	6.43
1948	22,400,000	3,350	132,000	22,300,000	0.91	6.15
1949	21,500,000	3,050	129,000	21,400,000	0.91	6.23
1950	24,000,000	2,790	123,000	23,800,000	0.97	6.56

MISCELLANEOUS CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
1951	25,100,000	4,320	169,000	24,900,000	1.18	7.40
1952	24,000,000	9,200	159,000	23,900,000	1.30	8.00
1953	25,600,000	3,670	152,000	25,500,000	1.26	7.69
1954	27,100,000	3,880	182,000	26,900,000	1.34	8.12
1955	29,800,000	4,960	224,000	29,600,000	1.19	7.24
1956	31,100,000	2,390	272,000	30,800,000	1.33	7.97
1957	27,600,000	3,980	266,000	27,300,000	1.36	7.89
1958	27,800,000			27,800,000	1.37	7.73
1959	31,500,000		252,000	31,200,000	1.32	7.39
1960	31,100,000		247,000	30,900,000	1.33	7.32
1961	30,700,000		277,000	30,400,000	1.31	7.14
1962	31,200,000		281,000	30,900,000	1.32	7.12
1963	32,600,000		329,000	32,300,000	1.35	7.19
1964	34,700,000		408,000	34,300,000	1.36	7.15
1965	35,700,000		207,000	35,500,000	1.34	6.93
1966	36,400,000			36,400,000	1.37	6.89
1967	35,700,000		274,000	35,400,000	1.46	7.13
1968	37,300,000		415,000	36,900,000	1.52	7.12
1969	38,500,000		358,000	38,100,000	1.65	7.33
1970	36,000,000	3,300	488,000	35,500,000	1.62	6.81
1971	40,600,000	3,160	337,000	40,300,000	1.68	6.76
1972	42,200,000	28,400	370,000	41,800,000	1.76	6.86
1973	45,200,000	5,230	405,000	44,800,000	1.77	6.50
1974	41,000,000	5,290	433,000	40,600,000	1.92	6.35
1975	32,400,000	4,120	291,000	32,100,000	2.06	6.24
1976	34,100,000	4,350	332,000	33,800,000	2.34	6.70
1977	34,400,000	4,350	319,000	34,100,000	2.73	7.34
1978	36,400,000	4,110	298,000	36,100,000	3.41	8.53
1979	33,800,000	6,110	272,000	33,600,000	3.63	8.15
1980	29,500,000	7,620	263,000	29,200,000	3.89	7.70
1981	25,000,000	11,000	239,000	24,800,000	4.40	7.89
1982	20,400,000	8,570	216,000	20,200,000	4.54	7.67
1983	24,700,000	7,880	162,000	24,500,000	4.69	7.68
1984	25,900,000	11,900	189,000	25,700,000	4.95	7.77
1985	27,400,000	16,600	207,000	27,200,000	4.82	7.30
1986	27,200,000	20,200	252,000	27,000,000	5.00	7.44
1987	29,300,000	19,100	273,000	29,100,000	5.01	7.19
1988	29,100,000	19,900	272,000	28,800,000	4.99	6.88
1989	26,700,000	20,600	210,000	26,500,000	5.26	6.91
1990	25,900,000	22,900	238,000	25,700,000	5.26	6.56
1991	24,700,000	28,500	197,000	24,500,000	5.33	6.38
1992	25,100,000	25,600	262,000	24,900,000	5.44	6.32
1993	25,300,000	27,900	293,000	25,000,000	5.42	6.11
1994	25,800,000	19,400	295,000	25,500,000	5.31	5.84
1995	25,600,000	17,100	338,000	25,300,000	5.90	6.31
1996	26,200,000	21,200	364,000	25,900,000	5.50	5.71
1997	24,600,000	21,400	390,000	24,200,000	6.10	6.19
1998	24,500,000	21,800	432,000	24,100,000	5.92	5.92
1999	24,800,000	22,800	329,000	24,500,000	6.25	6.12
2000	23,700,000	23,800	357,000	23,400,000	5.70	5.40
2001	23,200,000	26,100	337,000	22,900,000	5.56	5.12

MISCELLANEOUS CLAY STATISTICS
By David A. Buckingham and Robert L. Virta
[All values are in metric tons (t) unless otherwise noted]
Last modification: March 28, 2005

Year	Reported production	Reported imports	Reported exports	Estimated apparent consumption	Estimated unit value ($/t)	Estimated unit value (98$/t)
2002	23,000,000	29,900	449,000	22,600,000	6.43	5.83

Clay Worksheet Notes

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data are domestic clay material sold or used by producers. Prior to 1943 most of the clay used for the production of brick, sewer pipe and other heavy clay products was not included in the production statistics. Data are reported in the MR and the MYB.

Reported Imports
Data are clay material imported into the United States, as reported in the MR and the MYB.

Reported Exports
Data are clay material exported from the United States, as reported in the MR and the MYB. Export data are not reported prior to 1916.

Estimated Apparent Consumption
Apparent consumption data are not reported. For the years 1900–2002, apparent consumption data are estimated by using the following equation:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION (PRODUCER SALES)} + \text{IMPORTS} - \text{EXPORTS}.$$

Data are reported in the MR and the MYB. When clay data for a particular category were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)
Unit value is defined as the value of 1 metric ton (t) of clay apparent consumption. Data are estimated by using the following equation:

$$\text{UNIT VALUE} = (\text{PRODUCTION SALES VALUE} + \text{IMPORT VALUE} - \text{EXPORT VALUE}) / (\text{APPARENT CONSUMPTION}).$$

Data are reported in the MR and the MYB. When clay data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Ball Clay

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data are domestic ball clay material sold or used by producers. Data are reported in the MR and the MYB.

Reported Imports
Import data includes ball, common blue, and gross almerode clays. Prior to 1954, data were reported as common clay. Wrought or manufactured clays were included for the years 1954–2002. Data are reported in the MR and the MYB.

Reported Exports
Export data are ball clay only and were not reported separately prior to 1970. Data are reported in the MR and the MYB.

Estimated Apparent Consumption

Apparent consumption data are not reported. For the years 1900–2002, apparent consumption data are estimated by using the following equation:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION (PRODUCER SALES)} + \text{IMPORTS} - \text{EXPORTS}.$$

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)

Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1900–2002, unit value data are estimated by using the following equation:

$$\text{UNIT VALUE} = (\text{PRODUCTION SALES VALUE} + \text{IMPORT VALUE} - \text{EXPORT VALUE}) / (\text{APPARENT CONSUMPTION}).$$

Data are reported in the MR and the MYB. When data for a particular category were unavailable, data were presumed to be zero in making the above calculation.

Unit Value (98$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Bentonite

Data Sources

The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production

Data are domestic bentonite clay material sold or used by producers. Bentonite sold or used data were reported under the "Miscellaneous" clay category until separately reported in 1930. Data are reported in the MR and the MYB.

Reported Imports

Import data includes bentonite clays. Except for the years 1936–40 and 1952–55, prior to 1964, data were not separately classified but reported under the "Other" clay category in the MR publication. Data were not available for the year 1966. Data are reported in the MR and the MYB.

Reported Exports

Bentonite clay export data were not reported separately prior to 1957, except for the years 1939–40, 1942–48. Data were not available for the years 1963 and 1964. Data are reported in the MR and the MYB.

Estimated Apparent Consumption

Apparent consumption data are not reported. For the years 1930–64 sold or used data are used to estimate apparent consumption. For the years 1965–2002, apparent consumption was estimated using the following equation:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION (PRODUCER SALES)} + \text{IMPORTS} - \text{EXPORTS}.$$

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)

Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1930–64, the sold or used unit value data are used as an estimate for unit value. For the years 1965–2002, unit value was estimated using the following equation:

$$\text{UNIT VALUE} = (\text{PRODUCTION SALES VALUE} + \text{IMPORT VALUE} - \text{EXPORT VALUE}) / (\text{APPARENT CONSUMPTION}).$$

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Fire Clay

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data are fire and stoneware clay material sold or used by domestic producers. Data are reported in the MR and the MYB.

Reported Imports
Import data were not reported separately as fire clay prior to 1989. Data are reported in the MR and the MYB.

Reported Exports
Export data were not reported separately as fire clay prior to 1916. Data are reported in the MR and the MYB.

Estimated Apparent Consumption
Apparent consumption data are not reported. For the years 1900–2002 apparent consumption was estimated using the following equation:

APPARENT CONSUMPTION = PRODUCTION (PRODUCER SALES) + IMPORTS – EXPORTS.

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)
Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1900–2002, the sold or used unit value data are used as an estimate for unit value. Data are reported in the MR and the MYB.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Fuller's Earth

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data include fuller's earth material sold or used by domestic producers. Data are reported in the MR and the MYB.

Reported Imports
Fuller's earth import data were reported as wrought and unwrought fuller's earths prior to 1934. For the years 1935–82, and 1984–2002 data were reported as fuller's earth. Gross almerode clay was included with fuller's earth data for the years 1953–63. Data for the year 1983 were not available. Data are reported in the MR and the MYB.

Reported Exports
Export data were not reported separately prior to 1923. Data are not available for the years 1956–57 and 1963–64. Data are reported in the MR and the MYB.

Estimated Apparent Consumption
Apparent consumption data are not reported. For the years 1900–2002 apparent consumption was estimated using the following equation:

APPARENT CONSUMPTION = PRODUCTION (PRODUCER SALES) + IMPORTS – EXPORTS.

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)
Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1900–2002, unit value was estimated using the following equation:

UNIT VALUE = (PRODUCTION SALES VALUE + IMPORT VALUE – EXPORT VALUE) / (APPARENT CONSUMPTION).

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Kaolin

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data include kaolin, china, and paper clay material sold or used by domestic producers, except for the period 1905–12 when paper clay was reported separately. Data are reported in the MR and the MYB.

Reported Imports
Data are kaolin, china and paper clay imports. Data are reported in the MR and the MYB.

Reported Exports
Kaolin china and paper clay export data were not reported prior to 1945, except for the years 1922 and 1942. Data are Reported in the MR and the MYB.

Estimated Apparent Consumption
Apparent consumption data are not reported. For the years 1900–2002, apparent consumption was estimated using the following equation:

APPARENT CONSUMPTION = PRODUCTION (PRODUCER SALES) + IMPORTS – EXPORTS.

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)
Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1900–2002, apparent consumption was estimated using the following equation:

UNIT VALUE = (PRODUCER SALES VALUE + IMPORT VALUE – EXPORT VALUE) / (APPARENT CONSUMPTION).

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Miscellaneous Clay

Data Sources
The sources of data for the clay worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Production
Data include bentonite, brick, slip and miscellaneous clay material sold or used by domestic producers. Prior to 1905, data were reported as miscellaneous clays. Miscellaneous clays and slip clay were reported separately for the years 1905–34. Brick clay was reported separately for the years 1907–17. Bentonite clay was reported separately beginning in 1930. After 1934, data were reported as common clay. Data are reported in the MR and the MYB.

Reported Imports
Data were separately classified as wrought and unwrought clays prior to 1938, and as other clays for the years 1938–2002. Data are not available for the years 1958–69. Data for the years 1930–39 include artificially activated clays. Data are reported in the MR and the MYB.

Reported Exports
Export data were not reported prior to 1916, and not available for the years 1958 and 1966. Data includes fuller's earth for the years 1916–22, 1935–57, and 1963–64. Data does not include fuller's earth for the years 1935–55 and bentonite clay for the years 1939–40 and 1942–48. Data are reported in the MR and the MYB.

Estimated Apparent Consumption
Apparent consumption data are not reported. For the years 1900–2002, apparent consumption was estimated using the following equation:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION (PRODUCER SALES)} + \text{IMPORTS} - \text{EXPORTS.}$$

Data are reported in the MR and the MYB. When data for a particular category other than apparent consumption were unavailable, data were presumed to be zero in making the above calculation.

Estimated Unit Value ($/t)
Unit value is defined as the value of 1 metric ton (t) of apparent consumption. For the years 1900–2002, the sold or used unit value data are used as an estimate for unit value. Data are reported in the MR and the MYB.

Estimated Unit Value (98$/t)
The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

References
U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.
U.S. Bureau of Mines, 1934–96, Minerals Yearbook, 1932–94.
U.S. Geological Survey, 1901–27, Mineral Resources of the United States, 1900–23.
U.S. Geological Survey, 1997–2004, Minerals Yearbook, v. I, 1995–2002.

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